PROGRAM

Monday, May 17, 2004
Sacramento Convention Center
1400 J Street
Sacramento

8:00 am REGISTRATION

9:00 am WELCOMING REMARKS
Chris Poland, Chair, Strong Motion Instrumentation Advisory Committee (SMIAC)
Michael Reichle, Acting State Geologist, California Geological Survey
Anthony Shakal, Program Manager, Strong Motion Instrumentation Program

9:10 am INTRODUCTION
Moh Huang, Strong Motion Instrumentation Program

SESSION I

Moderator: ***Bruce Bolt***, UC Berkeley, SMIAC

9:15 am Design Ground Motion Library
Maurice Power, Geomatrix Consultants

9:40 am Seismological Implications of the Ground Motion Data from the 2003 San Simeon Earthquake
Vladimir Graizer, CSMIP and ***Doug Dreger***, UC Berkeley

10:05 am Questions and Answers for Session I

10:15 am BREAK

If you have any questions on the Seminar or need hotel information, contact Lisa Chisholm, CGS/ SMIP at 916/322-3105.

SESSION II

Moderator: ***Vern Persson***, SMIAC

10:35 am Seismic Analysis of the Sylmar Interstate 5 and Highway 14 Connector Bridge
Robert Dowell, Dowell-Holombo Engineering

11:00 am Evaluation of Nonlinear Static Procedures Using Strong Motion Records of Buildings
Rakesh Goel, California Polytechnic State University, San Luis Obispo

11:25 am Questions and Answers for Session II

11:35 am **LUNCHEON**

SESSION III

Moderator: ***Chris Poland***, Degenkolb Engineers, SMIAC

12:45 pm CSMIP Instrumentation Building Response Analysis and Three Dimensional Visualization System
Farzad Naeim, John A. Martin & Associates

1:10 pm Visualization of Seismic Bridge Motions
Robert Dowell, Dowell-Holombo Engineering

1:35 pm Questions and Answers for Session III

1:45 pm BREAK

SESSION IV

Moderator: ***Wilfred Iwan***, Caltech, SMIAC

2:00 pm Design and Instrumentation of the New San Francisco – Oakland Bay Bridge East Span
Brian Maroney and ***Pat Hipley***, Caltrans

2:25 pm Recorded Response and Observed Performance of a Wood-Frame Hospital Building During the 2003 San Simeon Earthquake
Moh Huang, CSMIP and ***Chris Tokas***, OSHPD

2:50 pm Questions and Answers for Session IV

3:00 pm Field Trip Introduction
Seismic Retrofit of the California State Capitol
Joseph Nicoletti, URS Corporation

3:15 pm Field Trip to California State Capitol

The Internet Quick Report (IQR) has been developed under CISN by CGS/CSMIP and USGS/SNMP to rapidly distribute strong-motion data and related information via the World Wide Web: http://www.cisn-edc.org

A CD containing the software system CSMIP-3DV presented by Farzad Naeim at the seminar will be available to the seminar attendees at a $10 reproduction cost. The system can be installed on a personal computer to allow users to view the 3-dimensional building motions recorded during earthquakes and to analyze building response parameters such as displacements, inter-story drifts, periods of vibration and so forth.

SMIP04 Seminar Registration Form

Name _____

Organization _____

Address _____

_____

City, State, Zip _____

Phone _____ Fax _____

E-Mail _____

Registration fee (includes seminar proceedings, powerpoint presentation handouts and lunch)

_____ $75 per person
_____ $50 for government employees
_____ $20 for students (age 35 and under)
_____ add $10 if registration postmarked after May 10, 2004
_____ $10 for CD of CSMIP-3DV

Total Amount Enclosed: _____

_____ I wish to participate in the field trip to the California State Capitol *(no extra cost)*

Please make check payable to **Department of Conservation** and mail with registration form to:

SMIP04 Seminar
Department of Conservation
Strong Motion Instrumentation Program
801 K Street, MS 13-35
Sacramento, CA 95814

If paying by credit card you can mail your registration form using the above address or fax to **(916) 323-7778**

VISA/MasterCard No. Expiration Date

Authorized Signature

Department of Conservation
Strong Motion Instrumentation Program
801 K Street, MS 13-35
Sacramento, CA 95814

SMIP04 Seminar

on Utilization of Strong-Motion Data

May 17, 2004
Sacramento, California

including
Field Trip to
California State Capitol

California Geological Survey

SMIP04 Seminar on Utilization of Strong-Motion Data

The purpose of this annual Seminar is to increase the utilization of strong-motion data in improving post-earthquake response, seismic code provisions and design practices. The Seminar is the fifteenth in a series of annual events designed to transfer recent research findings on strong-motion data to practicing seismic design professionals and earth scientists. The goal is to provide information that will be useful immediately in seismic design practice and post-earthquake response and, in the longer term, in the improvement of seismic design codes and standards.

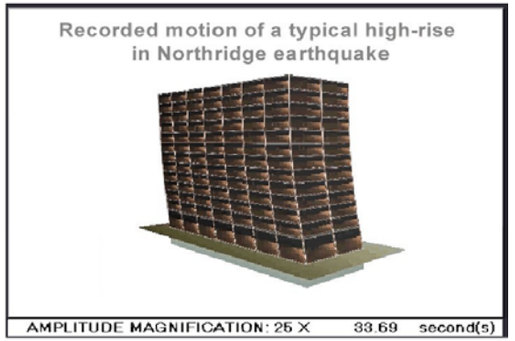
In 1997, a joint project, TriNet, between CSMIP, Caltech and USGS at Pasadena was funded by the Federal Emergency Management Agency (FEMA) through the California Office of Emergency Services (OES). The goals of the project were to record and rapidly communicate ground shaking information in southern California, and to analyze the data for the improvement of seismic codes and standards.

In July 2001, the California Office of Emergency Services began funding for the California Integrated Seismic Network (CISN), a newly formed consortium of institutions engaged in statewide earthquake monitoring that grew out of TriNet, and includes CGS, USGS, Caltech and UC Berkeley. CISN produces ShakeMaps of ground shaking, based on shaking recorded by stations in the network, within minutes following an earthquake. The ShakeMap identifies areas of greatest ground shaking for use by OES and other emergency response personnel in the event of a damaging earthquake. The CISN will improve seismic instrumentation and provide statewide ground shaking intensity maps. It will also distribute and archive strong-motion records of engineering interest and seismological data for all recorded earthquakes, and provide training for users (http://www.cisn.org).

Strong Motion Instrumentation of Seismically Strengthened California State Capitol

The California State Capitol was built in 1874. The Capitol was seismically strengthened in 1978 and instrumented with 12 sensors by CSMIP in 1988, recently upgraded to modern instrumentation.

Three-Dimensional Visualization of Recorded Building Motion



A screen from a video clip generated from the motion recorded at a 13-story building during the 1994 Northridge earthquake by a three-dimensional visualization software system. Video clips of recorded motions from buildings will be added to the CISN Engineering Data Center on the Internet.